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Computer Science-Technology Development
Software Development for the
Intelligent Monitoring System for Safeguards Applications

Nuclear material is stored throughout the world and monitoring the material is a big job. In 1996, the International Atomic Energy Agency handled over 1 million data records as part of its nuclear material monitoring activities. Creating software systems to assist with nuclear material monitoring can improve the process. In the Intelligent Monitoring for Safeguards Applications project, we are developing these software systems. In developing the software we have three main goals. We need software that can monitor nuclear material, so that the process will be more *efficient*. We also want the safest possible situation when it comes to nuclear material, so we need software that improves *safety*. Finally, we need to protect ourselves and the material from being tampered with, so the safeguards system is specifically designed to enhance *security*. We can save money by creating these systems because we will not need as many people to work in these areas. In addition, being able to monitor this material over the Internet would be a great advantage. Two software programs were developed which providing different ways to view the data from nuclear material sensors. The first program is a program that graphs nuclear data in real time. The second program averages out data from over different times and puts them in a table.